



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

JAN - 4 2010

Colonel Robert D. Peterson
District Engineer
Huntington District
U.S. Army Corps of Engineers
502 Eighth Street
Huntington, West Virginia 25701

Re: Public Notice 200800791; Hobet Mining, LLC; Surface Mine No. 45, Lincoln County, West Virginia

Dear Colonel Peterson:

The U.S. Environmental Protection Agency (EPA) has been participating in discussions with your staff and with company representatives of Hobet Mining, LLC to seek resolution to concerns expressed by our agency for the proposed Surface Mine No. 45 project. Hobet Mining, LLC's Surface Mine No. 45 is one of the 21 projects located in West Virginia identified for the enhanced coordination process (ECP) provided in the Memorandum of Understanding (MOU) signed by our respective agencies and the Department of Interior on June 11, 2009. The 60-day ECP timeframe began on November 2, 2009 and will expire today. These discussions have resulted in an agreement which addresses our concerns. Therefore, EPA believes the Corps may finalize their permit decision without further comment by EPA under the ECP.

During the project review process as provided by the June 11, 2009 Memorandum to the Field, EPA identified four areas of general concern. These included avoidance and minimization, water quality impacts, cumulative effects, and mitigation. The original project as proposed by Hobet Mining, LLC would have impacted 32,690 linear feet of stream channel and disturbed 602 surface acres. The streams on-site are good quality and are providing clean, freshwater dilution to the Mud River, an impaired stream.

Hobet Mining, LLC has addressed our concerns through a series of proposed actions. First, they have reduced physical stream impacts by nearly 50% to 16,267 linear feet of stream channel. These avoidance and minimization measures have been incorporated in a manner that still allows for extraction of 91% of the coal reserves originally proposed to be mined. Hobet Mining, LLC has also changed the mine design to incorporate upfront measures that are expected

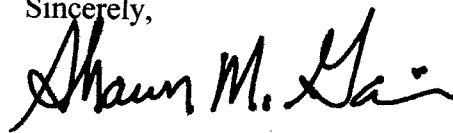


to be protective of water quality impacts. There are two receiving streams downstream of the mined area, Berry Branch and Stonecoal Branch. Based on the regional geology, there is a low expectation of any base flow discharge from the ponds in Berry Branch. In Stonecoal, the coal will be mined below the level of the stream and, therefore, any water infiltrating the backfilled area will have a low probability of discharging.

While EPA reasonably believes that in light of the regional geography and revised mining configuration water quality will be protected, to address water quality concerns should they arise, all parties have agreed to the enclosed monitoring plan and the implementation of the enclosed adaptive management plan. Finally, the applicant has agreed to biological, chemical and physical success criteria as part of the compensatory mitigation plan and is preserving 5,286 linear feet of Stonecoal Branch from future mining impacts. The implementation of mitigation success criteria will assure that the functions, including chemical and biological parameters, of the impacted waters will be replaced.

We appreciate the work your staff and Hobet Mining, LLC have undertaken to address the Agency's concerns. With the incorporation of the project modifications as described above into enforceable conditions within the Section 404 permit, EPA believes that a permit decision may move forward. In addition, we request a copy of the permit be sent to Hobet Mining, LLC for signature.

Sincerely,



Shawn M. Garvin
Regional Administrator

Enclosures



STONECOAL / BERRY BRANCH MONITORING PLAN

Chemical Monitoring Parameters

Each sample will be monitored for:

- Flow
- pH
- Iron
- Manganese
- Aluminum
- Selenium
- TDS
- TSS
- Conductivity
- Calcium
- Potassium
- Magnesium
- Sulfate
- Bicarbonate Alkalinity
- Chloride
- Sodium
- Total alkalinity
- Carbonate alkalinity

Chemical Sampling Frequency

Each agreed sampling location will be sampled two times per month. The sampling day of the month, for each sampling location, will be consistent month to month. As an example, Stonecoal #2 would always be sampled on the first Tuesday and third Tuesday of the month. To ensure comparison within a watershed the sampling in Berry Branch will be conducted on one day and in the Stonecoal watershed on another.

Chemical Sampling location

A map depicting all chemical sampling locations will be provided to the Corps and to EPA. All of the NPDES points will be included in the sampling protocol; the actual sampling point will be at the discharge from the sediment control structure.

In addition to the NPDES points there will be additional sampling points upstream of the upmost NPDES point on Stonecoal and downstream of the lowest NPDES point, just upstream of the confluence with Mud River. Similarly there will be a downstream monitoring point on Berry Branch just upstream of the confluence with Mud River. These downstream monitoring points are coincident with the Surface Water Baseline Monitoring Points used in the SMCRA permit.

In Berry Branch, the existing NPDES monitoring points on the south side of the stream, from the Hobet 44 permit, will be subject to this enhanced sampling protocol.

As a control, one of the watersheds that flow south into Stonecoal will be included in the monitoring plan.

Chemical Sampling Site

Each of the selected sampling sites will be prepared to allow repetitive reproducible sampling results. These site upgrades include the construction of concrete weirs at each NPDES point with permanent "V" notches to improve flow measurement.

For the in-stream sampling points in both Stonecoal and Berry Branch the cross section will be surveyed and permanent depth gauges installed.

Biological Monitoring

In addition to the twice monthly sampling benthic sampling will be conducted three (3) times per year: winter (Jan-Feb), spring (March-May), and summer (June-Sept), using the WVDEP standard field and laboratory methods, at the downstream monitoring points in both Stonecoal and Berry Branch and at upstream control sites, above the proposed mining disturbance. No benthic sampling will be conducted between October and January. A map depicting all biological sampling locations will be provided to EPA and the Corps. The WVDEP protocol shall be followed closely, including the use of a random 200 ($\pm 20\%$) organism fixed-subsample for calculation of the WVSCI. Although WVDEP currently use family-level macroinvertebrate taxonomy, genus-level identifications (excluding the family Chironomidae) shall accompany the WVSCI. In addition to WVSCI metrics, genus-level EPT richness, Ephemeroptera Richness, Plecoptera Richness, Clinger Taxa Richness, and % Ephemeroptera will be provided, at a minimum, for each sample.

Data Submittal

All of the collected monitoring data will be reported in raw (chemical values and taxa) and summarized format (e.g., WVSCI and metrics) within five (5) working days of receiving the sample results from the respective laboratories on a dedicated ftp site. Password protected access to this ftp site and the information on this site will be provided to both EPA and the CoE.

Quality Assurance

Replicate chemical samples should be collected at one site during each sampling trip. A field blank sample should be collected once per sampling trip to document that there is no contamination from containers or samplers. Preservative blanks should also be run for each trip to ensure that any preservatives are free of contaminants.

A replicate biological sample (properly labeled and preserved in ethanol) should be collected at one of the monitoring stations each season, and sent to EPA Region III-Wheeling for a quality assurance comparison check of biological field and lab methodologies. Additionally, one of the

biological samples per season should be sent to EPA Region III-Wheeling for a quality assurance check of taxonomic classification.

ADAPTIVE MANAGEMENT PLAN FOR CHANGES IN CONDUCTIVITY

Background

Recent studies conducted by the US Environmental Protection Agency have reported a correlation between the condition of benthic macroinvertebrate communities and conductivity. These findings were published in July 2008 by Greg Pond, Margaret Passmore and others in the Journal of the North American Benthological Society. The study evaluated 27 mined sites with valley fills. The proposed Hobet 45 permit does not include any valley fills.

The proposed permit does have discharges from sediment control structures that are constructed to collect and discharge surface water runoff from the mined area. There are two receiving streams downstream of the mined area, Berry Branch and Stonecoal Branch. Stonecoal Branch is down dip of the mining area and Berry Branch is up dip. Based on the regional geology, as described below, there is a low expectation of any base flow discharge from the ponds in Berry Branch.

In Stonecoal Branch, the coal will be mined below the level of the stream and therefore any water infiltrating the backfilled area will have a low probability of discharging. Based on the configuration of the mining, the water quality and quantity conditions experienced in a conventional valley fill where there is a perennial discharge at the toe of the fill are not expected to occur at this site. These issues are further discussed in Appendix B

As part of the permitting action it is proposed to conduct increased monitoring of the discharge from the sediment control structures and also the receiving streams. This increased monitoring will also include benthic sampling.

This adaptive management plan is to define an approach if elevated levels of conductivity greater than the baseline condition occur and is intended to address changes in water quality that could cause excursions from numeric or narrative water quality criteria if unaddressed.

Baseline Condition

As part of the SMCRA permit, baseline data for both Stonecoal Branch and Berry Branch were collected. The conductivity data from this sampling is detailed in the Table included as Appendix A to this document.

Actions

As there is no numeric water quality criterion for conductivity, combined with the concern that increases in conductivity may effect the condition of the benthic community and excursions from the narrative criterion associated therewith, the proposed plan is based on two components; the trends in conductivity from both the tributaries and the mouth of Stonecoal and Berry Branches plus definitive actions if there are repeated exceedances of the calculated threshold values.

Trend Analysis

The results from each of the twice-monthly enhanced chemical monitoring points will be plotted separately as a time series in order to determine if there are any trends in the conductivity levels. For the purpose of the analysis the actual value used will be the conductivity multiplied by the measured flow. This calculated value will not be used for threshold identification (see below). In addition, as the overall impact on both watersheds is the critical component of the analysis, the results from each sampling sweep (conductivity multiplied by flow) in Berry Branch and Stonecoal Branch will also be summed and the results plotted as a time series. These results will be conductivity multiplied by flow. There will be a separate plot for Berry Branch and Stonecoal Branch.

The threshold for the implementation of the adaptive management plan will be 300 μ mhos in all tributaries and Stonecoal Branch, and 500 μ mhos at the mouth of Berry Branch. These endpoints represent a threshold-response value that strongly correlates to biological impairment in small Central Appalachian streams.

If the linear trend of the Conductivity multiplied by Flow indicates that the result will exceed the threshold (tributaries or mouth of Berry and Stonecoal Branches) multiplied by the threshold flow within a 12-month period then the applicant will conduct a detailed analysis of the reasons for increased conductivity. A sample worksheet is attached as Appendix C. The applicant shall submit a report to the Corps and EPA describing this analysis within 30-days after three consecutive sets of sampling indicate that the trend will exceed the threshold. The report also shall include proposed actions to address the increased conductivity. The proposed actions to address the increased conductivity will be implemented within 45 days following written approval by the Corps, EPA, and any other appropriate regulatory authority.

The potential techniques that may be employed include, but are not limited to; revisions to material handling plans, revisions to the in-pit storage of stormwater; grading and vegetation of reclaimed areas, addition of pre-treatment ponds, and internal stormwater diversion.

Exceedance

The conductivity action-threshold for fee payment will be 500 μ mhos in Stonecoal Branch, and 500 μ mhos at the NPDES discharges to Berry Branch. If monitoring indicates an exceedance of threshold levels for more than two consecutive samples at the same location or more than three samples at the same location in a rolling 12-month period, then the applicant will incur an obligation to provide additional mitigation focused on chemical improvements within the watershed. The requirement will be reset after 24 consecutive sample reports indicate results below the threshold.

The projects to which the FCU can be applied will be defined in advance by the applicant and approved by the Corps, EPA, and any other appropriate regulatory authority. The mitigation obligation will be capped at 802 units as measured by the WV Stream and Wetland valuation metric.

If exceedances continue for more than 12 consecutive sampling periods, the applicant will retain, within 30 days, a consultant mutually agreed upon by the applicant and the Corps, EPA and any other appropriate regulatory authority. The consultant shall produce recommendations to reduce generation of dissolved solids within 120 days. The applicant shall implement the recommendations of the consultants within 45 days following written approval by the Corps, EPA, and any other appropriate regulatory authority.

APPENDIX A

Berry Branch / Stonecoal Branch Background Surface Water Quality Conductivity

	TRIBUTARY								MOUTH	
	Berry Branch						Stonecoal		Berry	Stonecoal
	122	BB-5	BB-4	121	BB-3	BB-2	SB-6	SB-4	BWQ-119	SB-1
13-Feb-05		37.8	43.7	51.4	45.1	46.1			95.4	47.0
24-Feb-05	49.6						46.9	45.8		
5-Mar-05	47.6	38.8	43.1	49.3	44.0	45.2	61.2	44.6	77.2	45.0
30-Mar-05	49.0					47.2	46.9	46.2		
26-Apr-05	49.2	39.1	46.2	49.8	45.8	48.6	46.8	46.3	79.1	49.2
28-May-05	55.0	37.0		68.0		47.0	43.6	43.0	230.0	46.0
20-Jun-05							40.1	36.2		
23-Jun-05	67.6			94.0					435.0	
16-Jul-05	70.6			110.0			44.0	48.0	370.0	72.0
2-Aug-05	68.5			106.0			52.0	41.5		71.3
12-Sep-05	102.0			150.0			51.3	66.8		
4-Oct-05	119.0									
5-Oct-05				179.0						
21-Oct-05									400.0	
2-Nov-05	79.0			110.0				47.0		112.0
8-Dec-05	78.0			95.0			48.0	46.0		57.0
16-Dec-05									69.0	
12-Jan-05	55.0			70.0					183.0	
17-Jan-06							44.7	44.0		45.0
8-Feb-06	43.0	35.0		55.0		40.0	41.0	40.0		45.0
15-Mar-06	44.0	37.0	43.0	50.0		44.0	46.0	44.0		50.0
7-Apr-06									397.6	
18-Apr-06	40.0	31.1	35.9	54.8	37.4	37.8				
19-Apr-06							377.0	48.0		53.0
9-May-06	53.1			62.6			44.0	43.0		50.9
20-Jun-06	120.0			180.0		43.0	44.0	37.1		43.0
6-Jul-06									288.5	
12-Jul-06	80.0			93.1			40.4	40.1		65.4
10-Aug-06	73.0			95.0			42.2	42.1		69.8
21-Sep-06				100.1						
9-Oct-06				76.1					665.0	
10-Nov-06				65.4						
20-Nov-06									1,202.0	
7-Dec-06									222.2	
8-Dec-06				65.4						
Mean	61.3	37.0	43.1	76.1	44.6	45.2	45.4	44.0	259.3	50.5
Std Deviation	23.9	2.8	3.8	38.5	3.9	3.5	78.2	6.3	302.4	17.7

APPENDIX B

Effect of Mining Direction on water quality

The currently approved SMCRA permit for the mine contemplates mining from the northwest to the southeast with the dragline pits roughly parallel to Stonecoal Branch. This approach also envisaged the placement of excess spoil into the mined through portions of Stonecoal Branch.

The recent changes to the mine plan have changed the direction of mining with the first cuts now located on the northern boundary of Berry Branch. The first action, before any dragline activity, will be to remove a strip of overburden, and associated coal, adequate to allow the dragline to dispose of the excess spoil from the first cut. This initial strip will be excavated using a shovel / truck fleet.

It is important to note that the coal seams within the permit area dip to the northwest and that the lowest seam proposed for mining is below the elevation of Stonecoal Branch at the location of the final pit.

At all times of mining any water falling onto the area will be directed into the mining pits. the sources of water will consist of:

- drainage from upland flow within the Berry Branch watershed, which will follow the pre-mining flow paths, until it is intercepted by the active mining area
- precipitation onto the active mining area
- precipitation and groundwater inflow into the previously mined pits, some of which will result in runoff to the south to the sediment control structure along Berry Branch; the remainder of which will migrate through the backfill until it intercepts the floor of the bottom mined out coal seam. It will then flow along the pavement until it discharges into the active mining area.

Based on these flow paths the majority of the water will accumulate in the base of the active mining pits and will not discharge through the sediment control structures. The water will be removed either by natural evaporation or through seepage into the coal seam. It is possible that some water will be pumped into the sediment control structures along Berry Branch.

Any pumped flow can be monitored for water quality prior to discharge and, as it is a controlled discharge (due to pumping), it can be stopped if there are any quality concerns.

The major contributor of dissolved solids is the flow of water through spoil prior to discharge. This is reduced by landforming and contemporaneous revegetation of the regraded area in order to increase runoff rather than infiltration. It is important to eliminate large flat areas where there is a potential for infiltration. In the proposed configuration any water infiltrating the backfill will discharge into the active pit rather than to a discharge point.

For the water accumulating in the pit, it will seep into the coal seams, which are natural aquifers. As these dip to the Northwest and do not outcrop this water should not discharge.

The dip of the coal seam and the layout of the active mining pits create the opportunity for retaining water in-pit, which has the added benefit of accumulating any stormwater peaks, thus attenuating any peak flows to the receiving streams.

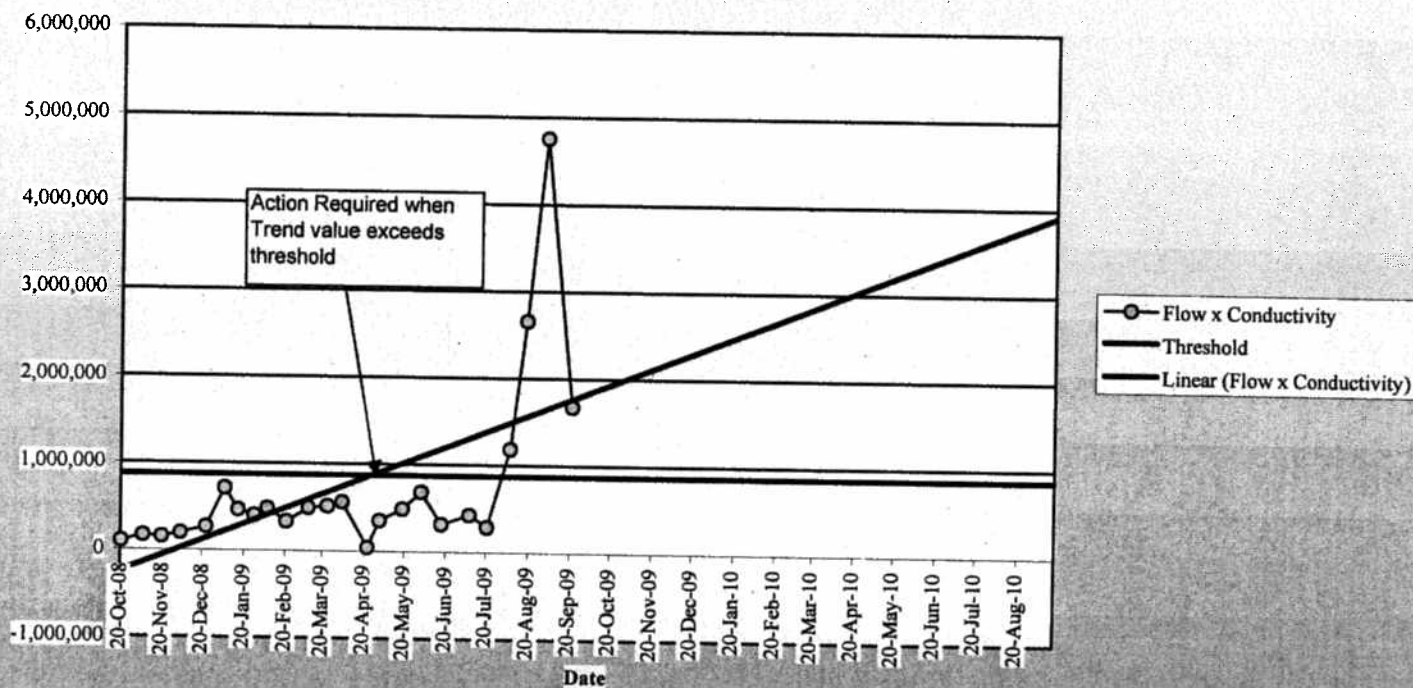
The ponds located on the south side of Stonecoal Branch will intercept the runoff from the regraded mine area, but they will not receive any base flow contribution from water infiltrating into the backfill, as this will have flowed through the spoil until it intercepts the basal coal seam, which is below the elevation of the creek.

Surface Mine 44
DSBB (119/UBB)

Description

DOWNSTREAM BERRY BRANCH (Mouth of Berry Branch Upstream of WV1017225 outlet)

Sample Point DSBB 119 - 12-month Trend



Date Sampled	Flow	Flow Units	Flow GPM	Specific Conductance UMHOS	Flow x Conductivity	Threshold	Previous 12 month data
9/16/10							
9/1/10							
8/17/10							
8/2/10							
7/18/10							
7/3/10							
6/18/10							
6/3/10							
5/19/10							
5/4/10							
4/19/10							
4/4/10							
3/20/10							
3/5/10							
2/18/10							
2/3/10							
1/19/10							

1/4/10								
12/20/09								
12/5/09								
11/20/09								
11/5/09								
10/21/09								
10/6/09								
9/21/09	1,963.0	GPM	1,963	853	1,674,439	872,808		1,674,439
9/1/09	3,690.0	GPM	3,690	1,290	4,760,100	872,808		4,760,100
8/18/09	3,800.0	GPM	3,800	700	2,660,000	872,808		2,660,000
8/6/09	2,205.0	GPM	2,205	539	1,188,495	872,808		1,188,495
7/20/09	397.0	GPM	397	728	289,016	872,808		289,016
7/7/09	556.0	GPM	556	771	428,676	872,808		428,676
6/16/09	635.0	GPM	635	500	317,500	872,808		317,500
6/1/09	3,011.0	GPM	3,011	227	683,497	872,808		683,497
5/18/09	878.0	GPM	878	558	489,924	872,808		489,924
5/1/09	878.0	GPM	878	403	353,834	872,808		353,834
4/22/09	1,272.0	GPM	1,272	34	43,248	872,808		43,248
4/3/09	2,206.0	GPM	2,206	256	564,736	872,808		564,736
3/23/09	3.4	CFS	1,544	334	516,305	872,808		516,305
3/9/09	3.2	CFS	1,432	345	494,246	872,808		494,246
2/20/09	2.1	CFS	943	355	334,509	872,808		334,509
2/6/09	3.1	CFS	1,391	351	487,815	872,808		487,815
1/27/09	1.6	CFS	736	552	406,317	872,808		406,317
1/15/09	2.5	CFS	1,113	419	466,611	872,808		466,611
1/5/09	3.1	CFS	1,382	517	714,699	872,808		714,699
12/22/08	1.3	CFS	588	458	268,995	872,808		268,995
12/3/08	0.7	CFS	305	646	197,162	872,808		197,162
11/19/08	0.4	CFS	189	800	150,807	872,808		150,807
11/5/08	0.5	CFS	220	759	166,924	872,808		166,924
10/20/08	0.3	CFS	139	721	100,318	872,808		100,318
10/7/08	0.4	CFS	171	709	120,924	872,808		
10/1/08	0.7	CFS	305	684	208,760	872,808		
9/24/08	0.2	CFS	90	740	66,427	872,808		
9/15/08	0.7	CFS	292	709	206,843	872,808		
8/26/08	0.4	CFS	184	716	131,759	872,808		
8/14/08	1.0	CFS	431	760	327,466	872,808		
7/30/08	0.7	CFS	328	692	226,731	872,808		
7/18/08	1.5	CFS	673	565	380,383	872,808		
7/10/08	6.0	CFS	2,702	287	774,921	872,808		
7/2/08	1.5	CFS	660	453	298,550	872,808		
6/26/08	1.1	CFS	507	653	331,187	872,808		
4/2/08	1.3	CFS	583	226	132,100	872,808		
1/4/08	0.3	CFS	148	1,333	197,436	872,808		
10/2/07	59.0	GPM	59	499	29,441	872,808		
9/18/07	65.0	GPM	65	418	27,190	872,808		
8/18/07	287.0	GPM	287	477	136,956	872,808		
8/10/07	100.0	GPM	100	438	43,800	872,808		
7/17/07	43.0	GPM	43	594	25,542	872,808		
7/3/07	106.0	GPM	106	511	54,166	872,808		
6/19/07	120.0	GPM	120	434	52,128	872,808		
6/5/07	5,043.0	GPM	5,043	1,129	5,693,547	872,808		
5/18/07	4,663.0	GPM	4,663	1,125	5,245,875	872,808		

5/3/07	4,152.0	GPM	4,152	1,272	5,281,344	872,808	
4/20/07	4,921.0	GPM	4,921	111	545,739	872,808	
4/5/07	3,263.0	GPM	3,263	212	691,756	872,808	
3/21/07	259.0	GPM	259	378	97,954	872,808	
3/5/07	357.0	GPM	357	622	222,054	872,808	
2/20/07	3,673.0	GPM	3,673	423	1,552,577	872,808	
2/5/07	5,108.0	GPM	5,108	1,640	8,377,120	872,808	
1/18/07	4,322.0	GPM	4,322	495	2,139,390	872,808	
1/6/07	3,214.0	GPM	3,214	510	1,639,140	872,808	
12/21/06	2,482.0	GPM	2,482	1,348	3,345,736	872,808	
12/7/06	3,325.0	GPM	3,325	222	738,815	872,808	
11/20/06	3,352.0	GPM	3,352	1,202	4,029,104	872,808	
11/15/06	941.0	GPM	941	131	122,895	872,808	
10/9/06	3,563.0	GPM	3,563	665	2,369,395	872,808	
10/9/06	1,224.0	GPM	1,224	144	176,623	872,808	
7/6/06	2,992.0	GPM	2,992	289	863,192	872,808	
4/7/06	4,115.0	GPM	4,115	398	1,636,124	872,808	
1/12/06	2,815.0	GPM	2,815	183	515,145	872,808	
12/16/05	23.1	CFS	10,355	69	714,461	872,808	

Threshold Calculation		1,746	500	872,808
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1	cfs	=	448.83	gpm
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